| 1.Component<br>NAVY  | FY 20 | 05 MILITARY CONS        | TRUCI | TION PROGRAM                                   |         | 2.Date<br>13 JAN 2004       |  |
|--|-------|-------------------------|-------|--|---------|-----------------------------|--|
| 3. Installation and Location/UIC: N68539 NAVY SUPPORT FACILITY DIEGO GARCIA, NAVAL FAC, BR INDIAN OCEAN TERR |       |                         |       | 4. Project Title SOLID WASTE MANAGEMENT CENTER |         |                             |  |
| 5.Program Element<br>0702776N  |       | .Category Code<br>83315 |       | roject Number<br>P146                          | 8. Proj | ject Cost (\$000)<br>17,500 |  |

#### 9. COST ESTIMATES

| 9. COST ESTIMATES                             |    |          |              |             |  |  |  |  |
|---|----|----------|--------------|-------------|--|--|--|--|
| Item  | UM | Quantity | Unit Cost    | Cost(\$000) |  |  |  |  |
| SOLID WASTE MANAGEMENT CENTER                 | LS |          |              | 11740       |  |  |  |  |
| LANDFILL (8 AC)                               | ha | 3.24     | 1,688,272.00 | (5470)      |  |  |  |  |
| LANDFILL CONTROL BLDG (592 SF)                | m2 | 55       | 6,364.00     | (350)       |  |  |  |  |
| TRUCK SCALE FACILITY                          | EA | 1        | 70,000.00    | (70)        |  |  |  |  |
| TIPPING AREA (5,005 SF)                       | m2 | 465      | 1,269.00     | (590)       |  |  |  |  |
| RECYCLING EQUIPMENT BUILDING (1,615 SF)       | m2 | 150      | 3,933.00     | (590)       |  |  |  |  |
| INCINERATOR (8,019 SF)                        | m2 | 745      | 6,134.00     | (4570)      |  |  |  |  |
| TECHNICAL OPERATING MANUALS                   | LS |          |              | (100)       |  |  |  |  |
| SUPPORTING FACILITIES                         |    |          |              | 3360        |  |  |  |  |
| SPECIAL CONSTRUCTION FEATURES                 | LS |          |              | (2210)      |  |  |  |  |
| ELECTRICAL UTILITIES                          | LS |          |              | (200)       |  |  |  |  |
| MECHANICAL UTILITIES                          | LS |          |              | (400)       |  |  |  |  |
| PAVING AND SITE IMPROVEMENTS                  | LS |          |              | (130)       |  |  |  |  |
| SITE PREPARATIONS                             | LS |          |              | (370)       |  |  |  |  |
| DEMOLITION                                    | LS |          |              | (50)        |  |  |  |  |
| SUBTOTAL                                      |    |          |              | 15100       |  |  |  |  |
| CONTINGENCY (5%)                              |    |          |              | 760         |  |  |  |  |
| TOTAL CONTRACT COST                           |    |          |              | 15860       |  |  |  |  |
| SIOH (6.5%)                                   |    |          |              | 1030        |  |  |  |  |
| SUBTOTAL                                      |    |          |              | 16890       |  |  |  |  |
| DESIGN/BUILD - DESIGN COST                    |    |          |              | 610         |  |  |  |  |
| TOTAL REQUEST ROUNDED                         |    |          |              | 17500       |  |  |  |  |
| TOTAL REQUEST                                 |    |          |              | 17500       |  |  |  |  |
| EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD) |    |          |              | (1040)      |  |  |  |  |

## 10. Description of Proposed Construction

This project proposes the construction of a 3.24 hectare (8-acre) lined sanitary landfill with leachate collection and treatment system; a pre-engineered batch incinerator facility, and a pre-engineered recycling equipment facility. The project includes clearing and grubbing, fence, access road, truck scale, a concrete masonry unit (CMU) landfill control building, electrical power system, telephone system, potable water holding tank and distribution system, and sewage collection system with septic tank and subsurface disposal field. Special construction features include closing the existing landfill. Technical operating manuals will be provided. Sustainable principles will be included into the design, development, and construction of the project in accordance with Executive Order 13123 and other laws and executive orders.

# 11. Requirement: $\underline{ t LS}$ Adequate: $\underline{ t LS}$ Subs

Substandard:

LS

### PROJECT:

This project proposes to construct a sanitary landfill and batch incinerator facility.

| 1.Component   | FY 2005 MILITARY CONSTRUCTION PROGRAM |             |      |                             | 2.Date<br>13 JAN 2004 |                   |
|---|---------------------------------------|-------------|------|-----------------------------|-----------------------|-------------------|
| IVAVI   |                                       |             |      |                             |                       | 13 UAN 2004       |
| 3. Installation and Location/UIC: N68539            |                                       |             |      | 4. Project Title            |                       |                   |
| NAVY SUPPORT FACILITY SOLID WASTE MANAGEMENT CENTER |                                       |             |      |                             | CENTER                |                   |
| DIEGO GARCIA, NAVAL FAC, BR INDIAN OCEAN TERR       |                                       |             |      |                             |                       |                   |
| 5.Program Element                                   | 6.Ca                                  | tegory Code | 7. P | . Project Number 8. Project |                       | ject Cost (\$000) |
| 0702776N  | 833                                   | 15          |      | P146                        |                       | 17,500            |

#### (Current Mission)

#### **REQUIREMENT:**

A lined sanitary landfill and an incinerator facility are needed for reliable, long-term disposal of solid wastes. Approximately 107 cubic meters per day of non-hazardous solid wastes are generated and require disposal. Incineration prior to landfilling is necessary to reduce the volume of landfilled waste and the size of the landfill. The limited land on Diego Garcia is either reserved for operational requirements or managed as water preservation areas to protect the island drinking water supply. Therefore waste reduction through incineration and diversion for recycling is critical for reducing the land area required for the new landfill. Recycling equipment is needed to process metals and glass for shipment for recycling and/or beneficial use on island. Recycling further reduces the quantity of landfilled waste.

#### CURRENT SITUATION:

Approximately 107 cubic meters per day of solid waste is generated by mission support activities from shore facilities and ships. The solid waste is burned in open, aircurtain type incinerators. Operation of these incinerators is characterized by visible smoke and open flames. Operators are exposed to heat, smoke and combustion gases. Ash removal is accomplished manually with ash still actively smoldering when removed. The residual ash is disposed in an existing 4.05 hectare unlined landfill. Certain materials, such as food waste, are disposed directly into the landfill without incineration.

The existing landfill and original incinerator facility were placed into operation in 1983. The original incinerator failed and was replaced by two packaged-type air-curtain incinerators. During the interim period before the replacement incinerators were placed into operation, solid waste was landfilled without incineration, rapidly depleting the available landfill capacity. Under the current revised landfill final grading plan and the projected solid waste loading, the existing landfill has sufficient capacity to accept incinerated waste through the year 2006. When the existing landfill capacity is exhausted, a new landfill is needed.

## IMPACT IF NOT PROVIDED:

The existing landfill will exceed its capacity. Solid waste may be stored in unlined areas in violation of the Diego Garcia Final Governing Standards, potentially endangering the environment. Stringent waste reduction measures may become necessary which could impose restrictions on the ability of various groups to accomplish their mission support activities.

| 1.Component FY 2005 MILITARY CONSTRUCTION PROGRAM NAVY |                               |            |              |              |              | 2.Date<br>13 JAN 2004 |  |
|--|-------------------------------|------------|--------------|--------------|--------------|-----------------------|--|
| 3. Installation and Loca                               | ation/UIC: N685               | <br>39     | 4. Project   | Title        |              |                       |  |
| NAVY SUPPORT FACILITY                                  | SOLID WASTE MANAGEMENT CENTER |            |              |              |              |                       |  |
| DIEGO GARCIA, NAVAL FAC                                | , BR INDIAN OCEAN             | TERR       |              |              |              |                       |  |
| 5.Program Element                                      | 6.Category Code               | 7. P       | roject Numbe | er 8. Pr     | oject Cost   | (\$000)               |  |
| 0702776N   | 83315                         |            | P146         |              | 17,500       |                       |  |
| 12. Supplemental Data                                  | 1:                            |            |              |              |              |                       |  |
| A. Estimated Design Data                               | a:                            |            |              |              |              |                       |  |
| 1. Status:   |                               |            |              |              |              |                       |  |
| (A) Date Design Star                                   | t                             |            |              |              | 082002       |                       |  |
| (B) Date Design 35%                                    | Complete                      |            |              |              | 092004       |                       |  |
| (C) Date Design Comp                                   | leted                         |            |              |              | 042005       |                       |  |
| (D) Percent Complete                                   | d as of SEPTEMBER             | 2003       |              |              | 3%           |                       |  |
| (E) Percent Completed                                  | d as of JANUARY               | 2004       |              |              | 3%           |                       |  |
| (F) Type of Design C                                   | ontract                       |            | Design Build |              |              |                       |  |
| (G) Parametric Estim                                   | ate used to develo            | p cost     |              | Yes          |              |                       |  |
| (H) Energy study/Life                                  | e cycle analysis p            | erformed   |              |              | Yes          |                       |  |
| 2. Basis:  |                               |            |              |              |              |                       |  |
| (A) Standard or Defin                                  | nitive Design:                |            | No           |              |              |                       |  |
| (B) Where Design Was                                   |                               | N/A        |              |              |              |                       |  |
| 3. Total Cost (C) = (A                                 |                               | \$580      |              |              |              |                       |  |
| (A) Production of Pla                                  | \$500                         |            |              |              |              |                       |  |
| (B) All other Design                                   | Costs                         |            | \$80         |              |              |                       |  |
| (C) Total  | \$580                         |            |              |              |              |                       |  |
| (D) Contract   | \$80                          |            |              |              |              |                       |  |
| (E) In-House   |                               | \$500      |              |              |              |                       |  |
| 4. Contract Award                                      |                               |            | 012005       |              |              |                       |  |
| 5. Construction Start                                  |                               | 042005     |              |              |              |                       |  |
| 6. Construction Comple                                 | ete                           |            |              |              | 042007       |                       |  |
| B. Equipment associated                                | with this project             | which wi   | ll be provi  | ded from oth | ner appropri | lations:              |  |
|  |                               |            | _            | Fiscal Yea   | <u>ir</u>    |                       |  |
| Equipment  |                               | Procur     |              | Appropriat   |              | Cost                  |  |
| Nomenclature   |                               | Approp:    | riation      | Or Request   | <u>.ed</u>   | <u>(\$000)</u>        |  |
| Civil Engineering Suppo                                |                               |            | OPN          | 2005         |              | 1,040                 |  |
| JOINT USE CERTIFICATION                                |                               |            |              |              |              |                       |  |
| The Regional Commander                                 |                               |            |              |              |              | se                    |  |
| potential. Unilateral                                  |                               |            |              |              |              |                       |  |
| utility/infrastructure                                 |                               |            |              |              |              | •                     |  |
| however, all tenants o                                 | n this installation           | on are ber | nerited by t | nıs project  | •            |                       |  |
|  |                               |            |              |              |              |                       |  |

DD Form 1391 C

Activity POC: Randy Torigoe

Phone No: DSN 243-9247